(d) if so, the details thereof;

(e) whether scientists of BHU have held successful trial of vehicles with hydrogen as fuel; and

(f) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF NON CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN): (a) Yes, Sir. Hydrogen has the potential of a safe, clean and non-polluting fuel, which can be used for transportation, cooking and conversion into electrical energy.

(b) to (f) Hydrogen is locked in hydrocarbons and water on Earth's surface. Hydrogen can be produced from water and solar energy and other renewable sources of energy. Hydrogen is also produced and used by various chemical industries, including chloralkali units. The Ministry of Non-Conventional Energy Sources (MNES) have taken up a broad based Research Development and Demonstration programme on hydrogen which includes production, storage and utilisation of hydrogen for transportation purposes, and other applications. Banaras Hindu University (BHU), Varanasi, as part of the project funded by MNES, has demonstrated the use of hydrogen as an alternative fuel in two-wheelers. BHU is currently implementing a demonstration project supported by this Ministry, for 50 Nos. of hydrogen-powered motorcycles.

Panipat Power Project

5187. MISS MABEL REBELLO: Will the Minister of POWER be pleased to state:

(a) whether there has been no significant addition of power generation capacity as a number of projects like Panipat Power Project approved in principle are still languishing;

(b) if so, the reasons therefore;

(c) how many such projects are there;

(d) what are the measures taken by Government for these projects to start functioning so that these plants can start producing electricity; and

(e) by when these projects will fructify?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRIMATI JAYAWANTI MEHTA): (a) to (e) The Planning Commission had fixed a target of 40245.2 MW for capacity addition during Ninth Plan. The break-up was as under:—

(In MW)

	Central Sector	Private Sector	State Sector	Total
Thermal	7574	17038.5	4933.0	29545.5
Hydro	3455	550	5814.7	9819.7
Nuclear	880.0	0.0	0.0	880.0
TOTAL :	11909	17588.5	10747.7	40245.2

Achievement during 9th Plan are given as under:—

	Central	Private	State	Total
Thermal	3084	4975	5538	13597
Hydro	540	86	3912	4538
Nuclear	880	—	—	880.0
TOTAL :	4504	5061	9450	19015

A capacity of 21230 MW has slipped. The reasons that adversely affected the progress of project implementation are:

(i) Delayed financial closures of private sector projects due to non-availability of escrow.
(ii) Paucity of funds for public sector projects.
(iii) Delay in land acquisition.
(iv) Delay in investment dicision.
(v) R&R problems.
(vi) Law and Order problems.
(vii) Contractual problems.
(viii) Inter-State disputes in respect of hydro projects.

In order to ensure that power projects targeted for capacity addition in the 10th Plan are commissioned without any time and cost overruns, the Ministry of Power has put in place a strong monitoring mechanism which includes weekly reviews.

Expiry of Agreement Made by M/s Duncan North Hydro Power Company

†5188. SHRI MANOHAR KANT DHYANI: Will the Minister of POWER be pleased to answer to Unstarred Question No. 1151 given in the Rajya Sabha on 28th November, 2001 and state:

(a) whether the agreement has not expired automatically following the work has not started after two years have elapsed despite the commitment made by the Duncan's North Hydro Power Company on 1st April, 2000;

(b) if so, whether Government have intimated the same to the company and the statutory compensation has been asked for; and

(c) if so, by when and if not, reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRIMATI JAYAWANTI MEHTA): (a) to (c) the Power Purchase Agreement was signed jointly on August 28, 1998 between Government of Uttar Pradesh, Uttar Pradesh State Electricity Board and M/s. Duncans North Hydro Power Company Limited for the 330 MW Shrinagar Hydro Electric Power Project in Uttar Pradesh (now in Uttaranchal). The project was accorded techno-economic clearance of Central Electricity Authority on June 14, 2000. As per the techno-economic clearance, the Commercial Operation Date of the first generating unit of the project is 30.06.2005 and the last unit on 30.09.2005. The techno-economic clearance of CEA has only stipulated that if there is delay in commencement of the project beyond April 1, 2001 and delay in commissioning of the project, the project promoter shall not claim any extra cost on account of reasons whatsoever.

The promoters of the project are yet to achieve financial closure and commence construction activities as the land required for execution of the project has not been handed over by the State Government and escrow arrangement for the project has not yet

†Original notice of the question was received in Hindi.